

REMARKS

The application has been reviewed in light of the final Office Action dated January 29, 2007. Claims 12 and 16-21 were pending in this application, with claims 1-11, 13-15, 22 and 23 having previously been canceled, without prejudice or disclaimer. By the present Amendment, claims 12 and 16 have been amended to more clearly point out the relevant subject matter, and new claims 24-27 have been added. Therefore, claims 12, 16-21 and 24-27 are pending, upon entry of this Amendment, with claims 12 and 16 being in independent form.

Claims 12, 16 and 18-21 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over U.S. Patent No. 4,902,584 to Uchiyama et al. in view of U.S. Patent No. 1,156,693 to Ide et al. Claims 12, 16 and 18-21 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over U.S. Patent No. 1,156,693 to Ide et al. in view of U.S. Patent No. 4,920,007 to Sawamura et al.

As previously pointed out in the record, the subject matter of this application is an optical phase variation type data recording medium (wherein data are recorded on such medium by forming amorphous portions on the phase variation type recording layer, and the data are read from the recording layer by applying a coherent light beam and determining transitions between the amorphous portions and crystalline portions on the recording layer from respective light reflected from the amorphous portions and from the crystalline portions), and Uchiyama and Sawamura are directed to magneto-optical recording medium in which recording and readback do not operate in the same manner as phase optical phase variation type data recording medium.

In magneto-optical recording media, recording is performed by changing the direction of magnetization of a recording layer by irradiating a light beam and applying a magnetic field.

Although the recording layer in a magneto-optical recording medium can include phase conversion type materials, such materials are used because the different phases have different magnetic property, and data is encoded in such a recording layer by direction of magnetization. The relevant properties of the recording layer material are Kerr rotation angle and Curie point, both of which are magnetic properties. Readback from such media is not obtained by determining transitions between amorphous portions and crystalline portions on the recording layer, but rather by determining the direction of magnetization.

Accordingly, one skilled in the art would not have looked to Uchiyama and Sawamura when the subject matter is an optical phase variation type data recording medium wherein data are recorded on such medium by forming amorphous portions on the phase variation type recording layer, and the data are read from the recording layer by applying a coherent light beam and determining transitions between the amorphous portions and crystalline portions on the recording layer from respective light reflected from the amorphous portions and from the crystalline portions (which Uchiyama and Sawamura do not teach or suggest).

Further, although each of Uchiyama and Sawamura proposes various protective layer materials that are purportedly sufficiently durable and corrosion resistant for a magneto-optical recording medium, neither Uchiyama nor Sawamura teaches or suggests that such protective layer materials are suitable for an optical phase variation type data recording medium wherein data are recorded on such medium by forming amorphous portions on the phase variation type recording layer, and the data are read from the recording layer by applying a coherent light beam and determining transitions between the amorphous portions and crystalline portions on the recording layer from respective light reflected from the amorphous portions and from the

crystalline portions.

Accordingly, applicant maintains that it would not have been obvious to combine Uchiyama or Sawamura with Ide.

Ide, as previously pointed out in the record, proposes a phase-change type of optical recording medium including a heat-resistance protective layer, but does not teach or suggest use of a protection layer constituted by SiO<sub>2</sub> as a basic material, and a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, and comprising silicon nitride in a molar ratio with the basic material of 10% to 85% silicon, as provided by the subject matter of independent claims 12 and 16.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 12 and 16, and the claims depending therefrom, are patentable over the cited art.

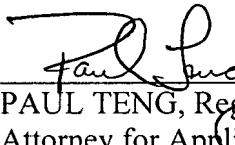
In addition, applicant does not find teaching or suggestion in the cited art of an optical phase variation type data recording medium comprising a reflective heat radiation layer, a first protection layer, a phase variation type recording layer consisting mainly of Ag, In, Sb and Te, a substrate and a second protection layer between the substrate and the phase variation type recording layer, wherein the first protection layer SiO<sub>2</sub> as a basic material, and a compound having a thermal conductivity greater than or equal to 10 W/m.deg when in a bulk state, the compound comprising silicon nitride in a molar ratio with the basic material of 10% to 85% silicon nitride, and wherein the thermal conductivity of the first protection layer is greater than a thermal conductivity of the second protection layer, as provided by the subject matter of new claims 24 and 27.

In view of the remarks hereinabove, Applicant submits that the application is now in condition for allowance, and earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such petition. The Office is hereby authorized to charge any fees that are required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

  
PAUL TENG, Reg. No. 40,837  
Attorney for Applicant  
Cooper & Dunham LLP  
Tel. (212) 278-0400